



**22. Why do you think a gecko's feet stick much better to a wall than your fingers? Think about surface area, intermolecular attractions, and the rough surface (on a microscopic level) of a typical wall.**

The small hairs increase the amount of surface area the gecko is putting on the surface it is climbing a lot so this increases the amount of intermolecular attraction between it and the surface. They fit well into the rough parts and grooves in the surfaces for even more attraction.

**23. Which of the following is NOT an attractive force between molecules:**

- covalent bond

**24. Which factors affect the strength of the intermolecular attractions? (check all that apply)**

- the polarity of the molecules
- the shape of the molecules
- the size of the molecules

**25. You have two substances: A and B. Both have molecules of similar size and shape. Substance A has molecules that attract with London dispersion attraction, and substance B has molecules that attract with dipole-dipole attraction. Which one will have the higher boiling point?**

- Substance B

**26. Explain why you chose Substance A or B.**

The dipole-dipole attraction is much stronger than the London dispersion attraction so it is harder to pull them apart/ heat them apart.

**27. You have two substances, both of which have the same boiling point (or attraction between their molecules). The first substance is made from molecules that are small**